forming a second layer of a second material over the first layer, the second material having a second work function; ~~and~~

removing a portion of the first and second layers;

wherein a stack formed by the first and second layers has a work function that is between the first work function and the second work function; and

providing optimal channel doping for a predetermined relationship between an on current, I_{on}, and an off current, I_{off}.

2. The method Claim 1, wherein the substrate is a silicon wafer with an insulating layer formed thereon.

3. The method of Claim 2, wherein the insulating layer comprises an oxide of silicon.

4. The method of Claim 2, wherein the second layer is substantially thicker than the first layer.

5. Cancelled.

10. (Currently amended) A method of tuning the work function of a gate electrode, comprising:

forming a layer of a first conductive material superjacent a gate dielectric; and

forming a layer of a second conductive material superjacent the first conductive material~~, wherein the thickness of the first conductive material is greater than a first critical thickness and less than a second critical thickness~~.

11. The method of Claim 10, wherein the first conductive material comprises a material selected from the group consisting of TiN, and TaN.

12. The method of Claim 10, wherein the second conductive material comprises a material selected from the group consisting Al, Ti, Ta, Ni, Pd, and Pt.

13. (Currently amended) The method of Claim 10, wherein the first conductive material comprises TiN, the second material comprises Al, and wherein said first conductive material has a thickness between 20Å and 100Å.~~the first critical thickness is approximately 20 angstroms and the second critical thickness is approximatley100 angstroms.~~

14-17. Cancelled

Please add new claims:

27. (New) A method of forming a transistor comprising:

forming a gate electrode on an insulating film formed on a semiconductor substrate, wherein said gate electrode comprises a first material selected from the

group consisting of titanium nitride and tantalum nitride; and a second material formed on the first material wherein the second material is selected from the group consisting of aluminum (Al), palladium (Pd) and platinum (Pt); and

forming a pair of source/drain regions in said semiconductor substrate.

28. (New) The method of claim 27 wherein said transistor is a NMOS transistor and wherein said first film is titanium nitride and said second film is aluminum.

29. (New) The method of claim 27 wherein said transistor is a PMOS transistor and wherein said second material is palladium (Pd).